

DOCUMENT CONTROL PROCESSING FORM

File Number:	DESN0772 Item No. 01			
Document Date:	06/16/20			
Document Type:	Forms: DQA Form, WSDOT Concurrence, RCSR form, RFC stamp			
DCPF Author:	Kevin W.			
Subject:	RFC: As-Built Drainage Maintenance Manual			
To (Company):	WSDOT	To (Individual):	PARSHOTAM AJUDIA	
From (Company):	Jacobs	From (Individual):	Eric Crowe	
Additional Subject Information and/or Keywords		Schedule Activity:	N/A	
		Yes	No	
Distribution:		Attachments	<input type="checkbox"/>	<input type="checkbox"/>
Drainage Distribution		Notes:		

Design Quality Audit Checklist

DESIGN PACKAGE/SUBMITTAL NAME: As Built Drainage Maintenance Manual			
DISCIPLINE: Drainage		AUDIT DATE(S): 06/09/2020 to 06/16/2020	
AUDIT ITEM(S): As Built Drainage Maintenance Manual dated June 2020; Manual Checkprint; RCSR form; WSDOT RFC concurrence email		CONFORMS	
AUDITOR: <u>Marinus R. Voskuilen</u>		YES	NO
1. Calculations:			
a) Have both original documents and check prints been provided for audit?		<input type="checkbox"/>	<input type="checkbox"/>
b) Are procedures for marking-up check prints being followed (R-Y-G)? (Red/Yellow – Checker, Green – Backchecker/Checker, Yellow – Verifier)		<input type="checkbox"/>	<input type="checkbox"/>
c) Are the check prints appropriately signed-off and dated?		<input type="checkbox"/>	<input type="checkbox"/>
d) Have Checker comments been incorporated/addressed/resolved?		<input type="checkbox"/>	<input type="checkbox"/>
e) Did the checker sign-off and date the original documents?		<input type="checkbox"/>	<input type="checkbox"/>
2. Computer Calculations:			
a) Have computer programs been approved/ verified? – Programs Used:		<input type="checkbox"/>	<input type="checkbox"/>
b) Has computer input been checked?		<input type="checkbox"/>	<input type="checkbox"/>
c) For non-verified spreadsheets, has input and output been checked?		<input type="checkbox"/>	<input type="checkbox"/>
d) Are the check prints appropriately signed-off and dated?		<input type="checkbox"/>	<input type="checkbox"/>
e) Have Checker comments been incorporated/addressed/resolved?		<input type="checkbox"/>	<input type="checkbox"/>
3. Drawings/Plan Sheets:			
a) Have Inter-Discipline Design Check (IDC) reviews been performed?		<input type="checkbox"/>	<input type="checkbox"/>
– Have Reviewer comments been incorporated or addressed?		<input type="checkbox"/>	<input type="checkbox"/>
– Did each Reviewer sign-off and date the review print?		<input type="checkbox"/>	<input type="checkbox"/>
b) Have both original documents and check prints been provided for audit?		<input type="checkbox"/>	<input type="checkbox"/>
c) Are procedures for marking-up check prints being followed (R-Y-G)?		<input type="checkbox"/>	<input type="checkbox"/>
d) Are the check prints appropriately signed-off and dated?		<input type="checkbox"/>	<input type="checkbox"/>
e) Have Checker comments been incorporated/addressed/resolved?		<input type="checkbox"/>	<input type="checkbox"/>
f) Has the WSDOT spreadsheet for CADD conformance (symbolology, naming) been provided?		<input type="checkbox"/>	<input type="checkbox"/>
4. Specifications:			
a) Have both original documents and check prints been provided for audit?		<input type="checkbox"/>	<input type="checkbox"/>
b) Are procedures for marking-up check prints being followed (R-Y-G)?		<input type="checkbox"/>	<input type="checkbox"/>
c) Are the check prints appropriately signed-off and dated?		<input type="checkbox"/>	<input type="checkbox"/>
d) Have Checker comments been incorporated/addressed/resolved?		<input type="checkbox"/>	<input type="checkbox"/>
5. Other Design Documents (Reports, Deviations, etc):			
a) Have both original documents and check prints been provided for audit?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Are procedures for marking-up check prints being followed (R-Y-G)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Are the check prints appropriately signed-off and dated?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have Checker comments been incorporated/addressed/resolved?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Reviews:			
Were scheduled design reviews completed?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
– Do review comments have an agreed upon action code?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
– Are the review comments incorporated/addressed/resolved?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
– Have corrections been verified (signed-off) on Form RCSR?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. The signature below certifies the requirements of Section 4.5 (Design QA Audits and Certification) of the QMP have been fulfilled.			
DQAM _____ Date _____			
8. This Section to be Completed for RFC Packages Only. The signature below certifies that the documents included in this submittal are in compliance with the requirements to be Released For Construction.			
DQAM  Date <u>06/16/2020</u>			
Comments/Notes: 1. WSDOT RFC concurrence email provided.			

**I-405 / SR 167 Interchange Direct Connector Design Build Project
Review Comment Summary and Resolution Form**

Package Description: DESN0770 Final: Drainage Maintenance Manual						Submittal Date: 5/19/2020		
Reviewer: Alan Black/WSDOT, Mike Golden/WSDOT Maintenance (Name/Title/Organization)						6/2/2020		
Comment		Sheet No. *	Review Comment	Initial Code **	Response	Response By	Final Code ***	Correction Verified by
No.	By							
Code: A=Accept Comment; B=Review and Discuss Comment; C=Evaluated but Not Incorporated; D=Comment Beyond Scope or Beyond Design Phase								
Note: * Indicates Sheet No., Page No. and Line No. or "G" for General Comment; ** Filled out by Design; *** Agreed Resolution (code "B" is not acceptable)								
1	AB	G	<p>Please show the following WSDOT HATS system numbers in the upper right header of each of the BMP Maintenance sheets (replace the WSDOT#### that is there now). There is a unique number for each facility:</p> <p>Pond S2.2 WSDOT0001337386 Pond S2.3 WSDOT0001337387 CABS DR10-7 WSDOT0001337389 CABS DR10A-5 WSDOT0001337388 CABS DR12-28 WSDOT0001337390 MFD DR07-4 WSDOT0001337384 MFD DR07-7 WSDOT0001337383 MFD DR13-31 WSDOT0001337385 MFD DR14-11 WSDOT0001351507</p>	A	Unique identifier numbers have been added to the sheets.	JDZ	A	TPH
2	MG	23	WSDOT will provide estimated "XXX" work hours per year under Table 3.3 by 6/5/2020.	A	WSDOT provided an estimate of 130 hours which has been added below Table 3.3.	JDZ	A	TPH

Jeff Zigweid

From: Russell, Elizabeth (Consultant) <RusselE@consultant.wsdot.wa.gov>
Sent: Tuesday, June 09, 2020 11:12 AM
To: Jeff Zigweid; Black, Alan (Consultant)
Cc: Sanchez, Guillermo (Consultant)
Subject: RE: [EXTERNAL] Direct Connect Maintenance Manual

Thanks Jeff.
Our comments have been addressed.

Thank you.
Elizabeth

From: Jeff Zigweid <JeffZ@paceengrs.com>
Sent: Monday, June 8, 2020 3:35 PM
To: Black, Alan (Consultant) <BlackAl@consultant.wsdot.wa.gov>; Russell, Elizabeth (Consultant) <RusselE@consultant.wsdot.wa.gov>
Subject: RE: [EXTERNAL] Direct Connect Maintenance Manual

Alan,

Yes, I believe this is an As-Built submittal. I've updated the cover page and inserted the as-built drainage plans into Appendix B. The updated version can be found here:

<https://www.dropbox.com/s/j9jvkgj5vzfveco/As-Built%20Direct%20Connector%20Maintenance%20Manual.pdf?dl=0>

Thanks,



Jeff Zigweid, PE | Project Manager
1724 W. Marine View Drive | Suite 140 | Everett, WA 98201
p. 425.486.6533
www.paceengrs.com

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From: Black, Alan (Consultant) <BlackAl@consultant.wsdot.wa.gov>
Sent: Monday, June 08, 2020 2:51 PM
To: Jeff Zigweid <JeffZ@paceengrs.com>; Russell, Elizabeth (Consultant) <RusselE@consultant.wsdot.wa.gov>
Subject: RE: [EXTERNAL] Direct Connect Maintenance Manual

Jeff,
Do you intend for this to be the As-Built deliverable?

If so, you need to change the title page accordingly.

From: Jeff Zigweid <JeffZ@paceengrs.com>
Sent: Monday, June 08, 2020 12:15 PM
To: Russell, Elizabeth (Consultant) <RusselE@consultant.wsdot.wa.gov>; Black, Alan (Consultant)

<BlackAI@consultant.wsdot.wa.gov>

Subject: RE: [EXTERNAL] Direct Connect Maintenance Manual

Thanks Elizabeth,

Attached are my comment responses. I've uploaded the revised document to our Dropbox account due to file size. It can be accessed at the link below:

<https://www.dropbox.com/s/aup4h4i7ik2pizz/RFC%20Direct%20Connector%20Maintenance%20Manual.pdf?dl=0>

Thanks,



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From: Russell, Elizabeth (Consultant) <RusselE@consultant.wsdot.wa.gov>

Sent: Monday, June 08, 2020 10:40 AM

To: Jeff Zigweid <JeffZ@paceengrs.com>; Black, Alan (Consultant) <BlackAI@consultant.wsdot.wa.gov>

Subject: RE: [EXTERNAL] Direct Connect Maintenance Manual

Good morning Jeff,
It's going to be 130 hours.

I was working to send it back through Kahua.

Thanks,
Elizabeth

From: Jeff Zigweid <JeffZ@paceengrs.com>

Sent: Monday, June 8, 2020 10:37 AM

To: Russell, Elizabeth (Consultant) <RusselE@consultant.wsdot.wa.gov>; Black, Alan (Consultant) <BlackAI@consultant.wsdot.wa.gov>

Subject: RE: [EXTERNAL] Direct Connect Maintenance Manual

Hi Elizabeth,

Can you please send me the number for the hours estimate?

Thanks,



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From: Russell, Elizabeth (Consultant) <RusselE@consultant.wsdot.wa.gov>
Sent: Monday, June 08, 2020 10:17 AM
To: Black, Alan (Consultant) <BlackAl@consultant.wsdot.wa.gov>; Golden, Micheal <GoldenM@wsdot.wa.gov>
Cc: Jeff Zigweid <JeffZ@paceengrs.com>
Subject: RE: [EXTERNAL] Direct Connect Maintenance Manual

Mike -
you have already given us this number.
We are good.

Thanks,
Elizabeth

From: Black, Alan (Consultant) <BlackAl@consultant.wsdot.wa.gov>
Sent: Monday, June 8, 2020 8:58 AM
To: Golden, Micheal <GoldenM@wsdot.wa.gov>
Cc: Russell, Elizabeth (Consultant) <RusselE@consultant.wsdot.wa.gov>; Jeff Zigweid <JeffZ@paceengrs.com>
Subject: RE: [EXTERNAL] Direct Connect Maintenance Manual

Hi Mike,
Here's the information that you need to answer that. I don't have the latest estimate of maintenance crews time associated with each of these.
If you need number of CABS BMPs, use three.

Thanks,
Alan

Drainage facilities along 14th St in the Talbot Hill neighborhood will be maintained by the City of Renton. The following facilities installed by the project are expected to require inspection and maintenance.

Table 3.3: Summary of Drainage Quantities

Maintenance Item	Quantity
Mowing of grass lined ditches (swales)	8,823 lf
Number of catch basins	159
Length of enclosed drainage pipe	11,322 lf
Length of other underdrain systems	10,507 lf
Length of CABS	443 lf
Length of MFD	2,264 lf
Number of Detention Ponds	2
Length of traditional culverts	0
Length of fish-passable culverts	195 lf

It is estimated that **XXX** work hours per year will be needed to maintain drainage facilities for the Project.

From: Jeff Zigweid <JeffZ@paceengrs.com>

Sent: Monday, June 08, 2020 8:32 AM

To: Black, Alan (Consultant) <BlackAl@consultant.wsdot.wa.gov>; Golden, Micheal <GoldenM@wsdot.wa.gov>

Cc: Russell, Elizabeth (Consultant) <RusselE@consultant.wsdot.wa.gov>

Subject: [EXTERNAL] Direct Connect Maintenance Manual

WARNING: This email originated from outside of WSDOT. Please use caution with links and attachments.

Hi Mike and Alan,

Do you have an estimate for the number of hours of work per year for the Direct Connect Maintenance Manual?

Thanks,



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I-405 / SR 167 Interchange Direct Connector Design Build Project

Electronic RFC Sheet

The RFC and initial on this page represents that the following package is intended to be electronically RFC'd:

RFC: AS-BUILT DRAINAGE MAINTENANCE MANUAL

ATKINSON

JUN 16 2020 *KSM*

RELEASED FOR CONSTRUCTION